UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,889	09/23/2006	Seiji Kashioka		5759

7590 12/21/2010

Seiji Kashioka
19743 Vista Hermosa Dr
Walnut, CA 91789

EXAMINER	
MILLIKIN, ANDREW R	
ART UNIT	PAPER NUMBER
2832	

MAIL DATE	DELIVERY MODE
12/21/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/593,889	KASHIOKA, SEIJI	
	Examiner	Art Unit	
	ANDREW R. MILLIKIN	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 August 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,11 and 13-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7 and 11* is/are rejected.

7)☒ Claim(s) *13-16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

0. An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. **While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution.** The Office cannot aid in selecting an attorney or agent.

A listing of registered patent attorneys and agents is available on the USPTO Internet web site http://www.uspto.gov in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 & 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Rothbart (U.S. Patent No. 4,733,593, hereafter '593).

3. Claim 1: '593 teaches a metronome apparatus which indicates consecutive timing of beat of music with moving tempo (see abstract), comprising: first means for reading out data about all individual beat duration times stored in memory or media (22; 24; 48); second means for getting consecutive beat timings by using a timer, which is set to each of said beat duration times at beginning of each beat (22, 24, 66, 70); and third means for indicating the beat timing acquired by second means using audio output (64, 4) (see cols. 3-5).

4. Claim 2: '593 teaches a metronome apparatus claimed in claim 1, further comprising: fourth means for input of all individual beat timings with a button operated by user for initial input or partial modification purpose (Fig. 2); and fifth means for recording beat duration time data acquired by fourth means on memory or media (48, 22, 24) (see cols. 3-5).

5. Claim 4: '593 teaches a computer readable memory containing computer program to indicate consecutive beat timing (see abstract; Fig. 3), said program comprising: first program for reading out data about all individual beat duration time stored in memory or media (22; 24; 48); second program for getting consecutive beat timing by detecting time elapsed from beginning of each beat reaches said each duration time (22, 24, 66, 70); and third program for indicating the beat timing acquired by second program by visual, audio or other output (48; 64; 4) (see cols. 3-5).

6. Claim 5: '593 teaches a computer readable memory containing computer program claimed in claim 4, the program further comprising: fourth program for input of each one by one beat timing from a mouse or other device operated by user for initial

input or partial modification purpose (abstract; Fig. 2); fifth program for recording each one by one beat duration data on memory or media based on input by fourth program (48) (see cols. 3-5).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 3 & 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over '593, as applied to claim 1 above, in view of Tumblin (U.S. Patent No. 4,321,853, hereafter '853) and George (U.S. Patent No. 4,649,794, hereafter '794).

9. Claim 3: '593 teaches the metronome apparatus claimed in claim 1, but does not explicitly teach that the third means is a display for showing point of attention, which moves up and down, wherein downward movement changes to upward movement at the timing of beat, nor that the point of attention moves up and down on a vertical bar. However, '853 teaches that a metronome with a display for showing point of attention, which moves up and down, wherein downward movement changes to upward movement at the timing of beat can be advantageous for some people ('853, col. 3, lines 8-37). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a display like that of '853 with '593 since it was known to be advantageous for some people. Likewise, '794 teaches that a vertical bar

can be used in a metronome. It would have been obvious to one of ordinary skill in the art at the time the invention was made, or at least obvious to try, to have used a vertical bar like that of '794 with the obvious combination of '593 & '853 as a matter of design choice in order to have attained a desired aesthetic appeal. The combination outlined here would necessitate a means for calculating illumination point from time elapsed from beginning of the beat and a seventh means for controlling illuminating time ratio of two adjacent devices when the calculated illuminating point falls between these two devices (see, e.g., '853 & '794). As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included such means, since such a means would be necessary (and straightforward to design) in order to implement the device.

10. Claim 11: The obvious combination outlined above would provide the metronome apparatus claimed in claim 3, wherein upmost and down-most position of said point of attention change according to combination of meter and sequence number of beat coming next in a bar (see rejection above & '593, cols. 3-5).

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over '593, as applied to claims 1, 2, 4, & 5 above, and further in view of Miyake (U.S. Patent No. 5,256,832, hereafter '832) and Kikumoto et al. (U.S. Patent No. 4,694,724, hereafter '724). '593 teaches the concepts of claims 1, 4, & 5, as well as a step for input of every beats in whole music listening to recording of the first step using fourth program, and making duration data of the input using fifth program ('593, 22, 24, 66, 70; see cols. 3-

5), but does not explicitly teach a method of production of music minus one or karaoke (wherein sound of a part is excluded in recorded sound) utilizing those metronomes/computer programs comprising: first step for sound recording of performance by all members including said part to be excluded; third step for sound recording of performance excluding said part, wherein the performance is played in the same tempo with the performance of the first step, using the first computer program for reading out the duration data of each beat made in the second step and the second and third computer program for indicating the beat one by one according to the duration data; fourth step for writing the recorded sound made in the third step on media or producing copies of it.

12. However, karaoke or “music minus one” tracks are commonly known in the art to be comprised of full performances with one part removed such that performers can perform the removed part along with the karaoke track. Since ‘593 teaches a suitable method for inputting the beats of a track and displaying it using a metronome, and since metronomes have long been known to be useful in assisting performers to play with proper timing, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used, or at least to have tried using, this method to generate a metronome display in order to allow performers to play to the beat of the full performance. In creating a karaoke track (which are commonly known and would be obvious to create because they have long been known in the art to be useful in allowing users to play along with music), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized said generated metronome

display in the recording of said karaoke track in order to assist performers in playing with the proper timing and to have recorded the sound made on a media or to have produced copies of it in order to distribute the karaoke track to consumers.

13. Nonetheless, ‘593 does not specifically teach a step for sound recording of performance excluding said part, wherein the performance is played in the same tempo with the performance of the first step, using the first computer program for reading out the duration data of each beat made in the second step and the second and third computer program for indicating the beat one by one according to the duration data. However, ‘832 teaches a method for making duration data of each beat aligned with a recording (see second embodiment spanning cols. 11 & 12), as does '724 (see paragraph spanning cols. 3 & 4; the user simply inputs the tempo themselves). As is noted in ‘832, a beat which is human and rich in music and not fixed as in a [normal] metronome is preferable (col. 15, lines 5-7) and “in actual performance, usually, [a song’s] tempo varies during the performance due to the performer's feeling or degree of elation" in which case "the beat count speed varies.” It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the methods described in ‘832 or ‘724 with ‘593 in order to align the duration data of each beat with the recording of the first step in order to have provided duration data of each beat in the second step to the metronome in claim 1 or computer program stored in memory in claim 4 in order to have accounted for the fact that in actual performance, usually, a song’s tempo varies during the performance due to the performer’s feeling or degree of elation.

14. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over ‘593, ‘832, & ‘724, as applied to claim 6 above, and further in view of Endoh et al. (U.S. Patent No. 6,016,295, hereafter ‘295). '593, '832, & '724, as combined above, teach the method claimed in claim 6, but do not explicitly teach that the media in the fourth step is delivered in such a way that duration data of each beat of the second step is combined with recorded sound of the third step on separate track of the same media including but not limited to compact disk or on each individual media. However, ‘294 teaches that recording a practice rhythm count or metronome sound on a karaoke track can be advantageous in order to help users to keep proper timing with the track (col. 10, lines 56-57). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a practice rhythm count or metronome sound on the karaoke tracks generated and recorded in claim 6 in order to help users keep proper timing with the track. Presenting either the metronome sound and karaoke tracks in separate tracks would have been obvious to one of ordinary skill in the art at the time the invention was made in order to have provided users with the option of whether they want to listen to the metronome sound for the karaoke track, the karaoke track itself, or both at the same time.

Allowable Subject Matter

15. Claims 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not fairly teach or suggest the limitations described in claims 13-16.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW R. MILLIKIN whose telephone number is (571)270-1265. The examiner can normally be reached on M-R 7:30-5 and 7:30-4 Alternating Fridays (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elvin G Enad/
Supervisory Patent Examiner, Art Unit 2832

/Andrew R. Millikin/
Examiner, Art Unit 2832